REMARKS/ARGUMENTS

Reconsideration is respectfully requested in view of the above amendments and the following remarks.

Figure 14 is amended herein to include a legend identifying it as prior art.

No new matter has been added. Claims 1-10 are pending in the application.

In the Office Action, Figure 14 is objected to as lacking a legend identifying it as prior art. Applicants respectfully traverse the objection. Figure 14 is amended herein to include a legend identifying it as prior art. Applicants believe the amendment overcomes the objection. Reconsideration and withdrawal of the objection is respectfully requested.

Claims 1 and 6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Henshaw et al. (U.S. Patent No. 5,319,629). Applicants respectfully traverse the rejection.

Claim 1 of the present invention recites a holographic optical information recording/reproducing device. To reproduce the digital data, a coherent beam is projected to the recording medium. A reproduction signal beam is received by a two-dimensional photodetector array to read the data.

The device includes a tunable coherent light source that emits the coherent beam that is used for reproducing data.

The device also includes a control section that reads position information of the reproduction signal beam on the two-dimensional photodetector array, and controls the wavelength of the tunable coherent light source according to the position information.

Applicants emphasize that in the present invention according to claim 1, the two-dimensional photodetector array both receives the reproduction signal beam, and is read by the control section for position information of the reproduction signal beam. Applicants also emphasize that it is the coherent source that emits the beam projected to the recording medium, and that it is the wavelength of the coherent source that is controlled according to the position information.

The rejection characterizes Henshaw as disclosing a light source, a control section, and a two-dimensional photodetector array similar to those of the present invention. Applicants respectfully disagree. Even if the elements of Henshaw may be considered to be similar to those of the present invention, which point Applicants do not concede, the structure and function of Henshaw is entirely different from that of the present invention.

Applicants reference column 7, lines 40-62 of Henshaw. Therein, it is disclosed that a broadband light source 100 is used to produce an optical signal on an address output plane 144. The optical signal is indicative of the y-coordinate of a memory address. Once the memory address is identified, data is read onto an output data plane 134.

Applicants respectfully submit that this arrangement is entirely different from that of the present invention, in at least several respects.

In the present invention according to claim 1, the light source is coherent. Henshaw does not disclose or suggest that the broadband light source is a coherent light source. Indeed, at column 8, lines 3-5 Henshaw specifically distinguishes between the broadband light source and a coherent source, namely a tunable laser 102.

Also in the present invention according to claim 1, the light source is tunable. Henshaw does not disclose or suggest that the broadband light source is tunable.

The rejection asserts that Henshaw discloses a tunable coherent light source. However, the tunable coherent source 102 of Henshaw is a different element from that referred to at column 7, lines 47-52 and 59-62. The tunable coherent source of Henshaw is not disclosed to be used to determine position information, nor is position information disclosed to be used to adjust the wavelength of the tunable coherent source.

Henshaw does not disclose or even suggest the use of a tunable coherent light source in place of the broadband light source. Moreover, Applicants respectfully submit that using a tunable coherent light source in place of the broadband light source would destroy the invention of Henshaw. Also at column 8, lines 3-5 Henshaw discloses that it is by the use of a broadband source that multiple frequencies may be searched. Eliminating the broadband source, and/or searching multiple frequencies by tuning a source, instead of using the broadband source, would eliminate the disclosed function of Henshaw as well.

Also in the present invention according to claim 1, the control section reads position information of the reproduction signal beam on the two-dimensional photodetector array. In contrast, Henshaw discloses, for example at column 7, lines 47-52, an optical signal that is indicative of a memory address in terms of a y-coordinate, wavelength, and Bragg angle. Even if this is considered to be similar to position information on a two-dimensional photodetector array, which point Applicants do not concede, the position identified by Henshaw is at best a position of a memory address, not position information of a signal reproduction beam.

Furthermore, in the present invention according to claim 1, the control section controls the wavelength of the tunable coherent light source according to the position information. Henshaw does not disclose or suggest the controlling a wavelength of a light source according to position information. Indeed, as previously noted, the light source in question in Henshaw is the broadband light source, which is not even disclosed to be tunable.

Moreover, in the present invention according to claim 1, the two-dimensional photodetector array that is read by the control section for position information also receives the reproduction signal beam in order to reproduce digital data.

By contrast, Henshaw explicitly teaches the use of two different planes. At column 7, lines 47-52, Henshaw discloses that the address output plane **144** is used to sense an optical signal indicative of a y-coordinate, wavelength, and Bragg angle memory address. However, at column 7, lines 53-62, Henshaw discloses that the output data plane **134** is used to read the data.

Thus, even if Henshaw may be considered to determine position information and to reproduce digital data as in the present invention, which point Applicants do not concede, Henshaw requires two output planes for these two purposes, while the present invention according to claim 1 requires only one two-dimensional photodetector array.

In summary, Henshaw does not disclose or suggest determining a beam position for a coherent source as in the present invention, and does not disclose or suggest using beam position information to adjust the wavelength of that coherent source. Henshaw also does not disclose using a single photodetector array for both determining beam position and reading data. Applicants respectfully submit that Henshaw teaches an arrangement that is entirely different in both structure and function to that of the present invention.

As the present invention according to claim 1 includes features neither disclosed nor suggested by Henshaw, Applicants respectfully submit that claim 1 is not anticipated by Henshaw. Reconsideration and withdrawal of the rejection is respectfully requested.

Claim 6 depends from claim 1, and incorporates the limitations thereof. The remarks made above with regard to claim 1 apply equally to claim 6, and Applicants respectfully submit that separate arguments need not be presented in their support at this time. Applicants do not concede the correctness of the rejection, and reserve the right to present further arguments.

However, Applicants respectfully submit that Henshaw also does not disclose or suggest the features of claim 6.

For example, as recited in claim 6 of the present invention, the recording medium is disposed at a position different from a focus of the lens system.

The rejection asserts that Figure 1 of Henshaw shows an arrangement wherein a recording medium is disposed at a position different from a focus of a lens system. However, Applicants find no disclosure of this feature in Henshaw.

Applicants respectfully point out that a lens has two focus positions, one in front of the lens and one behind it. Thus, two elements in different locations may both be in focus positions of a lens or lens system. Applicants respectfully submit that Figure 1 of Henshaw appears to show such an arrangement. Absent some positive disclosure that the output data plane **134** and/or the address output plane **144** are disposed at positions different from a focus of the lens system, Applicants respectfully submit that feature this may not be inferred from Figure 1.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being obvious from Henshaw. Applicants respectfully traverse the rejection.

Claim 9 depends from claim 1, and incorporates the limitations thereof. The remarks made above with regard to claim 1 apply equally to claim 9, and Applicants respectfully submit that separate arguments need not be presented in their support at this time. Applicants do not concede the correctness of the rejection, and reserve the right to present further arguments.

Applicants appreciate the Examiner's determination that claims 2-5, 7, 8, and 10 include allowable subject matter. Applicants believe all pending claims likewise are in condition for immediate allowance.

As all matters raised in the Office Action are now addressed, Applicants respectfully request favorable reconsideration in the form of a Notice of Allowance.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicant's primary attorney-of-record, Douglas P. Mueller (Reg. No 30,300) at (612) 371-5237.

Respectfully submitted,

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Annotated Sheet Showing Changes

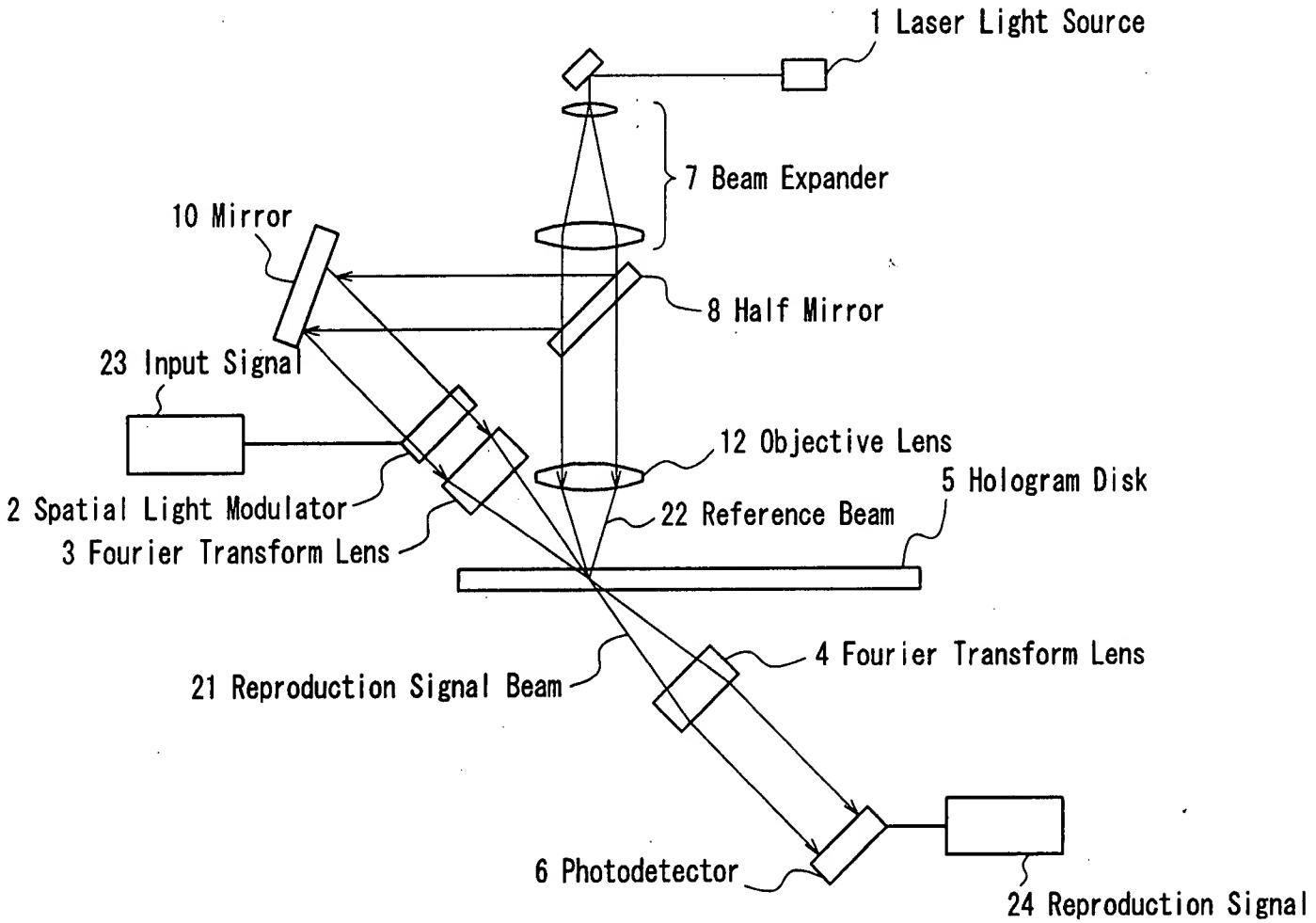

FIG. 14
PRIOR ART